AMENDMENTS TO THE CLAIMS

- 1 8 (canceled)
- 9. (Original) A flash memory device comprising:
 - a plurality of n-wells comprising an n-type conductivity material;
 - a plurality of p-wells comprising a p-type conductivity material, each p-well located within an n-well;
 - a plurality of flash memory array blocks, each comprising a plurality of flash memory cells arranged in rows that are coupled together by wordlines, each flash memory array block located within a different p-well of the plurality of p-wells; and a row decoder coupled to the plurality of memory array blocks through the wordlines, external address signals coupled to the row decoder such that a wordline is selected in response to the address signals.
- 10. (Original) The flash memory device of claim 9 wherein a voltage of 0V is applied to the n-well and a voltage of -5V is applied to the p-well of an unselected flash memory array block during an erase operation.
- 11. (Original) The flash memory device of claim 9 wherein a voltage of 5V is applied to the n-well and a voltage of 5V is applied to the p-well of an unselected flash memory array block during a program operation.
- 12. (canceled)
- 13. (Original) A flash memory device comprising:
 - a plurality of lower wells comprising a first conductivity material;
 - a plurality of isolation wells comprising a second conductivity material, each isolation well located within a lower well;
 - a plurality of flash memory array blocks, each comprising a plurality of flash memory cells arranged in rows that are coupled together by wordlines, each flash memory array block located within a different isolation well of the plurality of isolation wells; and

Serial No. 10/681,414

Title: COMMON WORDLINE FLASH ARRAY ARCHITECTURE

a row decoder coupled to the plurality of memory array blocks through the wordlines, external address signals coupled to the row decoder such that a wordline is selected in response to the address signals.

- 14. (currently amended) The flash memory device of claim 13 9 wherein a voltage of 0V is applied to the lower well and a voltage of -5V is applied to the isolation well of an unselected flash memory array block during an erase operation.
- 15. (currently amended) The flash memory device of claim 13 9 wherein a voltage of 5V is applied to the lower well and a voltage of 5V is applied to the isolation well of an unselected flash memory array block during a program operation.
- 16. (currently amended) The flash memory device of claim 13 9 wherein the first conductivity material is an n-type conductivity material.
- 17. (currently amended) The flash memory device of claim 13 9 wherein the second conductivity material is a p-type conductivity material.
- 18. (Original) A method for programming a memory cell in a memory array block of a plurality of memory array blocks, each memory array block located within a first conductivity material that is located within a second conductivity material, the method comprising: generating an address signal of the memory cell;
 - a row decoder selecting, in response to the address signal, a wordline signal that is coupled to the memory cell, the wordline signal additionally coupled to the plurality of memory array blocks;
 - coupling a first voltage that is greater than 0V to the first conductivity material of memory array blocks that are not selected by the wordline signal; and coupling a second voltage that is greater than 0V to the second conductivity material of memory array blocks that are not selected by the wordline signal.
- 19. (Original) The method of claim 18 wherein the first and second voltages are substantially equal to +5V.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 10/681,414

Title: COMMON WORDLINE FLASH ARRAY ARCHITECTURE

- 20. (Original) A method for erasing a memory cell in a memory array block of a plurality of memory array blocks, each memory array block located within a first conductivity material that is located within a second conductivity material, the method comprising: generating an address signal of the memory cell;
 - a row decoder selecting, in response to the address signal, a wordline signal that is coupled to the memory cell, the wordline signal additionally coupled to the plurality of memory array blocks; and
 - coupling a voltage that is less than 0V to the second conductivity material of memory array blocks that are not selected by the wordline signal.
- 21. (Original) The method of claim 20 wherein the voltage is substantially equal to -5V.
- 22. (currently amended) An electronic system comprising:
 - a processor that controls operation of the electronic system and generates address signals; and
 - a flash memory device coupled to the processor, the device comprising:
 - a plurality of memory array blocks, each comprising a plurality of memory cells arranged in rows that are coupled together by wordlines; and
 - a row decoder coupled to the plurality of memory array blocks through the

 wordlines, the row decoder coupled to the address signals and selecting a

 wordline in response to the address signals.
 - a plurality of lower wells comprising a first conductivity material;
 - a plurality of isolation wells comprising a second conductivity material, each isolation well located within a lower well;
 - a plurality of flash memory array blocks, each comprising a plurality of flash

 memory cells arranged in rows that are coupled together by wordlines,

 each flash memory array block located within a different isolation well of
 the plurality of isolation wells; and
 - a row decoder coupled to the plurality of memory array blocks through the

 wordlines, external address signals coupled to the row decoder such that a

 wordline is selected in response to the address signals.